

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

Docket No.: 200312693-1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Jay Tsao, et al.

Application No.: 10/632,206

Confirmation No.: 1124

Filed: 07/29/2003

Art Unit: 2681

For: SYSTEMS AND METHODS OF ROUTING  
DATA TO FACILITATE ERROR  
CORRECTION

Examiner: E. L. Moise

**AFFIDAVIT OF RICHARD W. ADKISSON**

1. My name is Richard W. Adkisson. I am of sound mind and legal age to make this affidavit. I have personal knowledge of the facts set forth below, and all said facts are true and correct.

2. I was first employed by Convex Computer on or about July 7<sup>th</sup>, 1986. Convex Computer was bought by Hewlett-Packard Company ("HP") in 1995. Thereafter, I became an HP employee and am currently employed at HP in the capacity of Hardware Engineer. I have held this position with HP for nine (9) years and with Convex Computer for nine (9) years before that.

3. In accordance with the duties of my position, I am familiar with the development and testing of the Concord chip and other parts associated with the HP Pinnacles chipset. The Pinnacles chipset has the capability of performing over one million commercial transactions per

minute. One benefit of this technology is that it would reduce the processing time for credit card swipe transactions thus increasing the overall number of swipes that can be processed per minute.

4. Application Serial No. 10/632,206, filed 07/29/2003, titled SYSTEMS AND METHODS OF ROUTING DATA TO FACILITATE ERROR CORRECTION, is directed to aspects of the Concord chip.

### **I. Description of the Pinnacles Chipset**

5. The Pinnacles chipset is comprised of a Concord chip, a JAB chip, and other components. Pinnacles sits upon a cell board with other parts, such as the processor, memory, and Input/Output (“I/O”) devices. In Pinnacles, the Concord chip sits on the North Bridge of the chipset and connects out to processors, connects via chips to I/O devices, and other parts on the cell board, and to other cell boards while the JAB chip helps with the memory. Further, the Pinnacles chipset can support faster processors such as the Intel Itanium 64-bit processor. Moreover, the Pinnacles chipset can support four operating systems: HP-UX (HP Unix), Linux, Microsoft Windows, and Open VMS.

### **II. Design of the Pinnacles Chipset**

6. HP designed the initial concept of the Pinnacles chipset, including the Concord chip. Afterwards, Agilent, as an independent contractor and working with HP engineers, helped translate the HP design into the proper placement of “metals” on an integrated circuit. Agilent essentially performed the physical layout of the design of the switches, transistors, resistors and such, based upon the design and specifications supplied by HP. Next, Taiwan Semiconductors Manufacturing Company (“TSMC”), a fabricator, was supplied an image file of the chipset so

that TSMC could produce the masks for the chip, and then from the masks produce the prototype chip for testing.

7. On or about May 12, 2002, 262 chipset prototypes were ordered by Agilent from TSMC at the direction of Hewlett Packard. Due to the cost of fabrication and to account for fallouts in the testing process, it is far more practicable to order extra prototypes than to reorder prototypes if the testing process were to require more than were made in the first batch.

8. HP then commenced a series of tests to discover design errors that would require a redesign or a “respin” of the chip set. Defects were actually found resulting in a “respin” which occurred on or about October 29, 2002.

9. Three prototypes with 16 cell boards each with the Pinnacles chipset, and thus with the JAB chipset, were sent to Microsoft beginning in the month of September of 2002 so that Microsoft could develop its products to be compatible with the Pinnacles chipset where necessary. At this stage the chips, and the system in which the chips were installed, were still undergoing testing and, in fact, the original chips (prior to the “respin”) were sent to Microsoft, with workarounds in place to compensate for the discovered design defects.

10. After the “respin” testing was again performed at least until February 7, 2003 in order to achieve the final chipset.

### **III. Presentation of the Pinnacles Chipset**

11. HP presented the Pinnacles chipset for use by the public at a conference on or about February 18-21 of 2003. The first shipment of the product to a customer occurred in the month of October of 2003.

12. At no time prior to the presentation could any of the prototype chips have been used commercially and all of the prototype chips were marked to avoid the possibility of any such commercial use. The systems in which these chips were tested did not have official tracked serial numbers and thus could not be commercially employed.

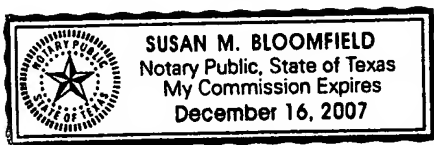
FURTHER AFFIANT SAYETH NOT.

2/17/2005  
Date

Richard W. Adkisson  
Richard W. Adkisson

United States of America )  
State of Texas )  
County of Dallas )

On this 17<sup>th</sup> day of February, 2005, before me personally came  
Richard W. Adkisson, to me known to be the individual described in and who  
executed the foregoing instrument, and acknowledged execution of the same.



Susan M. Bloomfield  
Notary Public

My commission expires: 12-16-07